

## CLAIMS:

1. A circuit arrangement comprising at least one circuit component (304) at which a load is applied that can vary during operation of said circuit arrangement, wherein said circuit arrangement comprises:
  - a. load determination means (40) for determining a load applied at said at least one circuit component (304); and
  - b. adjusting means (50) for adjusting drive capacity of said at least one component (304) responsive to said determination means.
2. A circuit arrangement according to claim 1, wherein said determination means (40) is configured to determine said load based on a configuration information loaded to said circuit arrangement.
3. A circuit arrangement according to claim 2, wherein said configuration information is stored in a configuration memory (40).
4. A circuit arrangement according to claim 2 or 3, wherein said configuration information comprises a configuration bit stream defining at least one of an input load and an output load of said at least one component (304).
5. A circuit arrangement according to any one of the preceding claims, wherein said adjusting means (50) is configured to vary a buffer or a buffer number of said at least one component (304).
6. A circuit arrangement according to claim 5, wherein said adjusting means (50) is configured to switch on or off buffers (304) or buffer sections (341 to 346) responsive to said determination means (40).

7. A circuit arrangement according to claim 5 or 6, wherein said adjusting means (50) is adapted to generate at least one control signal (CMN) for switching on or off said buffer sections (3041 to 3046).
- 5 8. A circuit arrangement according to claim 6, wherein said adjusting means (50) is adapted to derive said control signal only from a most significant bit signal of a selection signal obtained from said determination means 50.
9. A circuit arrangement according to any one of the preceding claims, wherein  
10 said adjusting means (50) is configured to vary a threshold voltage of circuit elements of said circuit arrangement.
10. A circuit arrangement according to claim 9, wherein said adjusting means (50)  
15 is adapted to change at least one bias voltage (VPW, VNW) responsive to said determination means (40).
11. A circuit arrangement according to any one of the preceding claims, wherein said circuit arrangement is a field programmable gate array device.
- 20 12. A method of controlling power consumption of a circuit arrangement, said method comprising the steps of:
- a. determining a load applied at at least one circuit arrangement; and
  - b. adjusting a drive capacity of said at least one component (304) responsive to said determination step.